

IN THE CLAIMS

Please amend the claims as follows:

Claims 1 and 2 (Canceled).

Claim 3 (Currently Amended): ~~The~~ A dynamic bandwidth assignment system ~~according to claim 1~~ including a network unit configured to carry out cell slot assignment, and a network termination unit configured to transmit cells to the network unit by cell slots assigned by the network unit, said network unit comprising:

a detection unit configured to detect valid cells and idle cells said network unit receives from said network termination unit;

a decision unit configured to output a decision result on a cell slot assignment to the network termination unit based on the detection results by said detection unit; and

a cell slot assignment unit configured to control the cell slot assignment to the network termination unit in response to the decision result of said decision unit,

wherein said decision unit is configured to supply the decision result to said cell slot assignment unit when a number of valid cells said network unit receives from said network termination unit in a decision period becomes less than a second predetermined threshold value, and wherein said cell slot assignment unit is configured to reduce a number of the cell slots to be assigned to said network termination unit in response to the decision result.

Claim 4 (Canceled).

Claim 5 (Currently Amended): ~~The~~ A dynamic bandwidth assignment system ~~according to claim 2~~ including a network unit configured to carry out cell slot assignment,

and a network termination unit configured to transmit cells to the network unit by cell slots assigned by the network unit, said network unit comprising:

a detection unit configured to detect valid cells and idle cells said network unit receives from said network termination unit;

a decision unit configured to output a decision result on a cell slot assignment to the network termination unit based on the detection results by said detection unit; and

a cell slot assignment unit configured to control the cell slot assignment to the network termination unit in response to the decision result of said decision unit,

wherein said decision unit is configured to supply the decision result to said cell slot assignment unit when a number of consecutive valid cells said network unit receives from said network termination unit exceeds a first predetermined threshold value, and wherein said cell slot assignment unit is configured to increase the number of the cell slots to be assigned to said network termination unit in response to the decision result, and

wherein said decision unit is configured to determine the first threshold value in accordance with the total number of cells said network unit receives from said network termination unit in a decision period.

Claim 6 (Currently Amended): ~~The~~ A dynamic bandwidth assignment system according to claim 3 including a network unit configured to carry out cell slot assignment, and a network termination unit configured to transmit cells to the network unit by cell slots assigned by the network unit, said network unit comprising:

a detection unit configured to detect valid cells and idle cells said network unit receives from said network termination unit;

a decision unit configured to output a decision result on a cell slot assignment to the network termination unit based on the detection results by said detection unit; and

a cell slot assignment unit configured to control the cell slot assignment to the network termination unit in response to the decision result of said decision unit,

wherein said decision unit is configured to supply the decision result to said cell slot assignment unit when a number of valid cells said network unit receives from said network termination unit in a decision period becomes less than a second predetermined threshold value, and wherein said cell slot assignment unit is configured to reduce a number of the cell slots to be assigned to said network termination unit in response to the decision result, and

wherein said decision unit is configured to determine the second threshold value in accordance with the total number of cells said network unit receives from said network termination unit in the decision period.

Claim 7 (Currently Amended): ~~The~~ A dynamic bandwidth assignment system according to claim 4 including a network unit configured to carry out cell slot assignment, and a network termination unit configured to transmit cells to the network unit by cell slots assigned by the network unit, said network unit comprising:

a detection unit configured to detect valid cells and idle cells said network unit receives from said network termination unit;

a decision unit configured to output a decision result on a cell slot assignment to the network termination unit based on the detection results by said detection unit; and

a cell slot assignment unit configured to control the cell slot assignment to the network termination unit in response to the decision result of said decision unit,

wherein said decision unit is configured to supply the decision result to said cell slot assignment unit when a number of valid cells said network unit receives from said network termination unit in a decision period exceeds a first predetermined threshold value, and

wherein said cell slot assignment unit is configured to increase a number of the cell slots to be assigned to said network termination unit in response to the decision result, and

wherein said decision unit is configured to determine the first threshold value in accordance with the total number of cells said network unit receives from said network termination unit in the decision period.

Claims 8 and 9 (Canceled).

Claim 10 (Currently Amended): ~~The~~ A dynamic bandwidth assignment method ~~according to claim 8~~ in a network unit comprising:

detecting valid cells and idle cells said network unit receives from a network termination;

producing a decision result on a cell slot assignment to the network termination unit based on the detection result; and

controlling cell slot assignment to the network termination unit in response to the decision result, and

wherein when a number of the valid cells said network unit receives from said network termination unit becomes less than a second predetermined threshold value, the step of controlling cell slot assignment decreases the number of the cell slots to be assigned to said network termination unit in response to the decision result.

Claim 11 (Canceled).

Claim 12 (Currently Amended): ~~The~~ A dynamic bandwidth assignment method ~~according to claim 9~~ in a network unit comprising:

detecting valid cells and idle cells said network unit receives from a network termination;

producing a decision result on a cell slot assignment to the network termination unit based on the detection result; and

controlling cell slot assignment to the network termination unit in response to the decision result,

wherein when a number of consecutive valid cells said network unit receives from said network termination unit exceeds a first predetermined threshold value, the step of controlling cell slot assignment increases the number of the cell slots to be assigned to said network termination unit in response to the decision result, and

wherein the first threshold value is determined in accordance with the total number of cells said network unit receives from said network termination unit in the decision period.

Claim 13 (Currently Amended): ~~The~~ A dynamic bandwidth assignment method according to ~~claim 10~~ in a network unit comprising:

detecting valid cells and idle cells said network unit receives from a network termination;

producing a decision result on a cell slot assignment to the network termination unit based on the detection result; and

controlling cell slot assignment to the network termination unit in response to the decision result,

wherein when a number of the valid cells said network unit receives from said network termination unit becomes less than a second predetermined threshold value, the step of controlling cell slot assignment decreases the number of the cell slots to be assigned to said network termination unit in response to the decision result, and

wherein the second threshold value is determined in accordance with the total number of cells said network unit receives from said network termination unit in the decision period.

Claim 14 (Currently Amended): ~~The~~ A dynamic bandwidth assignment method according to ~~claim 11~~ in a network unit comprising:

detecting valid cells and idle cells said network unit receives from a network termination;

producing a decision result on a cell slot assignment to the network termination unit based on the detection result; and

controlling cell slot assignment to the network termination unit in response to the decision result,

wherein when a number of the valid cells said network unit receives from said network termination unit exceeds a first predetermined threshold value, the step of controlling cell slot assignment increases the number of the cell slots to be assigned to said network termination unit in response to the decision result, and

wherein the first threshold value is determined in accordance with the total number of cells said network unit receives from said network termination unit in the decision period.